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(74) Agent: WATERMARK PATENT & TRADEMARK ATTORNEYS, 290 Burwood Road, Hawthorn, Victoria 3122 (AU).

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(71) Applicant (for all designated States except US):  
**STARGAMES CORPORATION PTY LIMITED**  
[AU/AU]; 13 Sheridan Close, Milperra, NSW 2214 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **O'HALLORAN, Terry** [AU/AU]; 2/167 Victoria Road, Bellevue Hill, NSW 2023 (AU). **MASEN, Andrew** [AU/AU]; 3/56 Boronia Street, Kensington, NSW 2033 (AU).

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(54) Title: LINEAR SCATTER JACKPOT METHOD AND SYSTEM

CREDIT

BET

WIN

(a)

X	X	2		A

CREDIT

BET

WIN

(b)

X	X	X		

(57) Abstract: A method for awarding a jackpot, and a corresponding gaming machine and system are disclosed. The jackpot is awarded based upon the presence of scatter symbols appearing in the game outcome in a predefined manner. The jackpot is preferred linked across multiple machines. In a preferred form, scatter symbols on one reel may be in an active or inactive state, the jackpot is awarded only if they are in the active state, and the probability of them being in an active state is dependant upon the size of the player's wager, so as to provide linear returns to players.

WO 2005/086018 A1



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## Linear Scatter Jackpot Method and System

### Technical Field

This invention relates to the provision of linear progressive jackpots triggered by scattered symbols on a gaming machine.

### 5 Background Art

On many gaming machine systems, progressive jackpots are provided. Such a jackpot may be awarded to a player when the player achieves a particular combination of symbols or the like on the machine, or at a random time. The present invention is concerned with the former type. Whilst such jackpots may be 10 implemented on single machines, the common implementation of such a game uses a jackpot pooled across many machines, so that the jackpot is relatively large and is won at reasonable intervals.

The jackpot value in such linked games is generally incremented by a designated portion of each player's wager being added to the pool.

15 Current gaming regulations in many parts of the world require players to be paid returns in proportion to their bet level. For example, if a player plays a single line gaming machine at 1 credit, and achieves 3 'X' symbols on a line and a prize of 5 credits is awarded, then it would be expected that a player achieving the same result and playing 2 credits on the same single line game would be 20 awarded 10 credits. This is referred to as linearity and ensures all players are paid prizes that are proportionate to their bet level.

In the instance of progressive jackpots, all players are contributing to a common prize pool that can be won by any player at any time. A popular format to win a jackpot prize is called a symbol driven link progressive. This format 25 requires that a player must achieve a certain combination on the gaming screen to be awarded a prize or jackpot, or is given the chance to win a jackpot through a bonus game or similar if they achieve this combination.

In order to meet regulations, any jackpot game must provide a linear chance of winning these jackpots. It is also a challenge to manufacturers to 30 implement the game in such a way that game play is entertaining, as well as the jackpot appearing achievable to the player.

It is an object of the present invention to provide a new, symbol driven jackpot system which is appealing to players and facilitates linear returns.

## Summary of the Invention

In a broad form, the present invention provides a method of providing a jackpot, in which the jackpot is triggered by symbols scattered across the screen and not confined to a payline.

5 According to one aspect, the present invention provides a method of providing a jackpot in a gaming machine, said machine having multiple simulated reels, and at least one payline, comprising at least the steps of:

- (a) determining a player's wager;
- (b) playing the game, so that the simulated reels assume a specific 10 configuration;
- (c) determining if scatter symbols appear across at least selected ones of said reels in a predefined manner, and if so then paying said jackpot.

The jackpot may be paid by paying in full a jackpot, either on a specific 15 machine or across linked machines; paying part of a jackpot; or allowing the player to play a game which determines if and/or the quantum of any jackpot. The specification and claims should be read using this definition unless the context requires otherwise.

In a preferred form, the scatter at least in part is reliant upon symbols with 20 an active and an inactive state. In the active state, these symbols act as part of the scatter to award the jackpot. The linearity is provided by making the probability that the symbol is active proportional to the size of the wager. In one form, this may be performed by having a different symbol, which only changes state after the reel is stationary.

25 As the probability that each symbol is active on the selected reel is independent of how many scatter symbols are present, this provides a simple, scalable way of ensuring linearity.

According to another aspect, the present invention provides a gaming 30 machine having multiple simulated reels, said machine including a processor, player wager selection means and a display, and at least one payline, the processor playing a game in accordance with software, the game including the steps of:

- (a) receiving a player's wager from the wager selection means;

(b) playing the game, so that the simulated reels are shown in a specific configuration on said display;

(c) determining if scatter symbols appear across said reels in a predefined manner, and if so then paying said jackpot.

5 Whilst the present invention may be implemented on a single machine, it is preferably implemented as a linked jackpot arrangement. In a preferred form, each gaming machine determines the outcome of individual game play locally, while contributing incremental credits to a central system. The jackpot amount and payouts are managed by the central system. The system may accordingly be  
10 managed centrally in essentially the same way as a conventional symbol driven jackpot system. The linked machines may be all on one site, or on linked sites, both of which are widely practiced for conventional linked jackpot systems.

As games and game types have evolved, different pay methods have been introduced to make games more exciting. One of the most popular is the scatter  
15 pay that does not require paylines to reward a player. In a scatter game, the appearance of the scatter symbols anywhere on the screen or in a pre-determined directional pattern (left to right, right to left, adjacent) pays a prize multiplied by the players total bet. The scatter feature is generally an addition to payline based games. The present invention awards a jackpot, or the chance to  
20 win a jackpot, based on a scatter combination. This is a game feature which has not previously been used to award a jackpot.

One of the keys to devising linearity formats is to ensure players understand how they are potentially being rewarded. As scatters are now an accepted form of paying combination, this invention takes the simple scatter pay  
25 and adds another dimension that retains the existing method of awarding prizes, but introduces another element that is over and above the standard slot game.

#### **Brief Description of the Drawings**

The present invention would be described with reference to the accompanying figure 1, which is an illustration of relevant reel symbols for an  
30 implementation of the present invention.

#### **Detailed Description**

It will be understood that there are a variety of ways to implement the present invention. The present invention may be readily implemented as an

additional feature on many existing slot machines, with appropriate modifications to the pay table to take account of incremental contributions to the jackpot. However, the invention will be principally described with reference to a specific implementation.

5 In this embodiment, the scatter symbol in question resides on reels 1,2 and 3 of a 5 reel game. The scatter symbol has an 'active' and 'inactive' position. While there are other potential embodiments based on this, in this example the scatter symbols are always 'active' on reels 1 and 2 for maximum exposure to the player. The scatter symbols on reel 3 are replaced by another symbol that, upon  
10 appearing on the completed position of the reels, reveals the scatter in an 'active' or 'inactive' position. The chance of revealing an 'active' symbol is the players wager divided by the maximum wager available.

The game may be configured in such a way that the base game prize for 3 x 'active' symbols is the same as 2 x 'active' and an 'inactive' symbol. The  
15 difference between the 2 is the player who gets the 3 'active' symbols wins a jackpot, or provides them entry into a feature that will or may award a jackpot. This approach to implementing the invention allows the game to be designed with some mathematically unique and innovative devices that will streamline the game development process and make games more flexible.

20 Firstly, the number of symbols that appear on reel 3 that is chosen to reveal the 'active' or 'inactive' position is not related to the number of possibilities there are. If the maximum bet on a particular game is 500 credits, and the player bets 100, then when the symbol lands on reel 3, it has a 20% chance (100/500) of being 'active' when revealed. If that same game was changed to modify the  
25 maximum bet, the reel strips have no need to be modified as the designer may select between 1 and n symbols to appear on the reel depending on aesthetics, game presentation or other variables.

A second game design feature is that this can be developed in a range of formats on a standard slot reel game. While most games are designed in a  
30 standard 5x3 matrix, this implementation of the present invention can be readily implemented in any other format.

Figure 1 is a representation of what the display on one slot machine would show when the game is being played. In this embodiment where the scatters

appear on reels 1,2 and 3, we have the situation in (a) where 'active' scatters appear on reels 1&2, and the symbol that will reveal 'active' or 'inactive' (designated by '?') appears on reel 3. While there are many implementations of how this may be presented to the player, our preferred embodiment is that the '?'

- 5 symbol will animate to reveal the 'active' scatter symbol or the 'inactive' scatter symbol. It will be appreciated that alternative implementations for the graphic elements are a matter of game designer choice.

The invention could similarly be implemented with, for example, an arrangement in which the symbol remains the same unless it becomes active, or  
10 in which the symbols appearing during the simulated reel spinning have already become active or inactive.

In (b), the '?' symbol has changed state to the active X symbol, and the jackpot is awarded. It will be understood that although the illustration shows the X symbols all appearing on the central pay line, they may equally be on the upper  
15 or lower positions on the same reel, as the jackpot is awarded for scattered symbols.

It will be understood that this implementation is merely illustrative. For example, there could be more or less reels with scatter symbols. The reels selected for the example are purely illustrative. The present invention can be  
20 readily added to existing games with modifications as required.

The term reels should be understood to include games in which symbols are arranged in different geometric patterns, with specific groups of symbols which move in a co-ordinated way being considered as reels.

It will be appreciated that the present invention is of broad application, and  
25 can be implemented in a variety of ways. Variations and additions are possible within the general scope of the present invention.

## CLAIMS

1. A method of providing a jackpot in a gaming machine, said machine having multiple simulated reels, and at least one payline, including at least the steps of:

- 5                   (a) determining a player's wager;  
                     (b) playing the game, so that the simulated reels assume a specific configuration;  
                     (c) determining if scatter symbols appear across said reels in a predefined manner, and if so then paying said jackpot.

10                  2. A method according to claim 1, wherein in step (b) one or more variable scatter symbols on at least one reel may appear in an active or inactive state, wherein the probability of said scatter symbol appearing in an active state is dependant upon the size of the player's wager.

15                  3. A method according to claim 2, wherein the probability of winning a jackpot based upon the scatter symbols is linearly dependant upon the size of the player's wager relative to a maximum possible wager.

16                  4. A method according to claim 3, wherein the inactive symbol is operative for non-jackpot game play.

20                  5. A method according to any one of the preceding claims, wherein the scatter symbols on some reels are always active, and on one or more reels some or all of the scatter symbols are only selectively active dependant upon the size of the player's wager relative to the maximum possible wager.

21                  6. A method according to any one of the preceding claims, wherein the jackpot is accumulated across a plurality of linked machines.

25                  7. A method according to any one of claims 1 to 6, wherein the jackpot is accumulated on a single machine.

26                  8. A system for operating a linked jackpot, comprising at least a plurality of gaming machines linked to a central jackpot controller, said central jackpot controller and said machines cooperating to implement the method  
30 according to any one of claim 1 to 6.

27                  9. A method of awarding a jackpot in a simulated reels gaming machine, wherein dependant upon the configuration of reels after game play, one or more reels may include active scatter symbols, and one reel may include a set

of symbols which selectively form active or inactive scatter symbols, the jackpot being won by a predetermined combination of active scatter symbols in a game outcome display including one on the said one reel, wherein the probability that a scatter symbol is active on the game outcome display is dependant upon the size  
5 of the player's wager, and a maximum possible wager for the machine.

10. A gaming machine having multiple simulated reels, said machine including a processor, player wager selection means and a display, and at least one payline, the processor playing a game in accordance with software, the game including the steps of:

- 10 (a) receiving a player's wager from the wager selection means;  
(b) playing the game, so that the simulated reels are shown in a specific configuration on said display;  
(c) determining if scatter symbols appear across said reels in a predefined manner, and if so then paying said jackpot.

15 11. A gaming machine according to claim 10, wherein one or more scatter symbols on at least one reel may appear in an active or inactive state, wherein the probability of the scatter symbols appearing in an active state is dependant upon the size of the player's wager, and the jackpot is paid only if active scatter symbols appear across said reels in a predefined manner.

20 12. A gaming machine according to claim 11, wherein the probability of winning a jackpot based upon the active scatter symbols is linearly dependant upon the size of the player's wager relative to a maximum possible wager.

13. A gaming machine according to claim 11 or claim 12, wherein the inactive symbol is operative for non-jackpot game play.

25 14. A gaming machine according to any one of claims 10 to 13, wherein the scatter symbols on some reels are always active, and on one or more reels some or all of the scatter symbols are only selectively active dependant upon the size of the player's wager relative to the maximum possible wager.

30 15. A system for operating a linked jackpot game, comprising at least a plurality of gaming machines according to any one of claims 10 to 14, said gaming machines being linked to a central jackpot controller, said central jackpot controller and said machines cooperating to provide a pooled jackpot incremented from wagers on all of said gaming machines.

16. A gaming machine having multiple simulated reels, said machine including a processor, player wager selection means and a display, and at least one payline, the processor playing a game in accordance with software, wherein dependant upon the configuration of reels after game play, one or more reels may

5 include active scatter symbols, and one reel may include a set of symbols which selectively form active or inactive scatter symbols, the jackpot being won by a predetermined combination of active scatter symbols in a game outcome display including one on the said one reel, wherein the probability that a scatter symbol is active on the game outcome display is dependant upon the size of the player's

10 wager, and a maximum possible wager for the machine.

17. A computer software product, adapted to implement the method of any one of claims 1 to 9.

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**Figure 1**

# INTERNATIONAL SEARCH REPORT

International application No.  
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## A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: keywords: gaming machine, poker machine, jackpot, prize, wager, bet, scatter, pattern, symbol, payline, payout, proportion, percentage and similar terms

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0216165 A (SINGER et al.) 20 November 2003 Entire document, see in particular paragraphs [0009] and [0012]	1-17
X	CA 2399931 A (KONAMI GAMING, INC.) 20 August 2002 Entire document, see in particular pages 3 to 5 and page 17 lines 6 to 16	1-17
X	US 6155925 A (GIOBBI et al.) 5 December 2000 Entire document, see in particular column 2 lines 34 to 46 and column 4 lines 3 to 58	1-17
X	EP 1063622 A (WMS GAMING, INC.) 24 May 2000 Entire document, see in particular abstract	1-17

Further documents are listed in the continuation of Box C       See patent family annex

* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		

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Name and mailing address of the ISA/AU <b>AUSTRALIAN PATENT OFFICE</b> PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized officer <b>John Thomson</b> Telephone No : (02) 6283 2214

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/AU2005/000304

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member				
US	2003216165	NONE					
CA	2399931	NONE					
US	6155925	AU    48788/00 ZA    200004079	CA    2314050		EP    1076321		
EP	1063622	AU    37950/00 ZA    200003144	CA    2308964		US    6358147		

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX